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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,499	01/10/2002	Kuang-Ming Chen	49996-9004	9172

7590 05/19/2005

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EXAMINER

COFFY, EMMANUEL

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,499

Applicant(s)

CHEN, KUANG-MING

Examiner

Emmanuel Coffy

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-13, 15-18, 20-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) 14, 19 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. This action is responsive to the application filed on January 10, 2002. Claims 1-24 are pending. Claims 1-24 are directed to a "System and Method for Interruption-free File Access."

Specification

2. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited.

Claim Objections

3. Claims 18-20, 22-24 are objected to because of the following informalities: the claims recite: "...wherein one of said at least one I/O access agent module implementing said registering..." this is grammatically incomplete. The Examiner understands these recitations to mean: "...wherein one of said at least one I/O access agent module is implementing said registering..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7 and 25 directed to a system and method are rejected under 35 USC 102(e) as being anticipated by Sonoda et al. (US 6,850,955).

Sonoda teaches a storage system which, includes multiple interfaces for external connection, multiple disks accessed from multiple interfaces, and a shared memory accessed from multiple interfaces. The multiple interfaces are block interfaces executing disk block I/O request, and file interfaces of file servers executing file I/O request. (See abstract.)

Claim 1:

An information service system for providing interruption-free information access service to a plurality of users communicating to said system via a communications network, said system comprising: (See Fig. 1)

a main program subsystem executing a main program for providing said information access service to said users by receiving I/O access requests issued by said users; (See fig. 1, col. 5, line 57-col. 6, line 6.)(It is inherent that a computer system includes a main program for executing software codes to perform the intended output.)

an information storage subsystem for storing information required for implementing said information service; and (See Fig. 1 (100).)

an I/O access agent subsystem processing said I/O access requests issued by said users by registering said requests received by said main program subsystem and submitting said received requests to said information storage subsystem for implementing the read or write accesses corresponding to said requests, said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said users upon completion of said submitted requests. (See abstract, Fig. 1 (110, 120, 130), col. 13, line 59-col. 14, line 47, col. 8, lines 3-67.)

Claim 2:

The information service system of claim 1, wherein said information storage subsystem comprises at least one information storage means integrated for providing information storage functionality as a whole for said information service. (See col. 8, lines 3-67.)

Claim 3:

The information service system of claim 2, wherein each of said at least one information storage means is a disk-based storage device. (See Fig. 1, col. 6, lines 16-24.)

Claim 4:

The information service system of claim 2, wherein each of said at least one information storage means is an information storage server. (See Fig.1, col. 6, lines 24-35.)

Claim 5:

The information service system of claim 2, wherein each of said at least one information storage means is a server cluster including at least one server connected in a local area network. (See Fig. 1 (113, 123, 132, 190) col. 5, lines 41-45.)

Claim 6:

The information service system of claim 1, wherein said I/O access agent subsystem comprises at least an I/O access agent module integrated for implementing said registering and submission of said requests as a whole for said information service. (See abstract and col. 7, lines 5-8.)

Claim 7:

The information service system of claim 1, wherein said main program subsystem comprises at least a main program module integrated for receiving said I/O access requests issued by said users as a whole for said information service. (See col. 7, lines 5-8; col. 8, lines 3-40.)

Claim 25:

A method for providing interruption-free file access service to users communicating to an information service via a communications network in an information service system comprising a main program subsystem, an information storage subsystem and an I/O access agent subsystem, said method comprising the steps of: (See Fig. 1)

a) said main program subsystem registering information access requests issued by said users in a list and submitting said requests to said I/O access agent subsystem; (See fig. 1, col.

5, line 57-col. 6, line 6.)(It is inherent that a computer system includes a main program for executing software codes to perform the intended output.)

b) said I/O access agent subsystem submitting said requests issued by said users to the information subsystem for implementing read or write accesses corresponding to said requests; and (See col. 8, lines 24-32.)

c) said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said users upon completion of access of said submitted requests by said information storage subsystem, wherein said information service system continuing said information service for said users before said completion of an I/O access that is pending. (See abstract, Fig. 1 (110, 120, 130), col. 13, line 59-col. 14, line 47, col. 8, lines 3-67.)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-24 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sonoda et al. (US 6,850,955) in view of Spaur et al. (US 6,196,920.)

Sonoda teaches the invention substantially as claimed including a storage system, which includes multiple interfaces for external connection, multiple disks accessed from multiple interfaces, and a shared memory accessed from multiple interfaces. The multiple interfaces are block interfaces executing disk block I/O request, and file interfaces of file servers executing file I/O request. (See abstract.)

Claim 8:

An on-line game information service system for providing interruption-free game information access service to a plurality of game players communicating to said system via Internet, said system comprising:

a main program subsystem executing a main program for providing said game information access service to said players by receiving I/O access requests issued by said players; (See Fig. 1, col. 5, lines 57-67.)

an information storage subsystem for storing game information required for implementing said game information service; and (See Fig. 1 (100))

an I/O access agent subsystem processing said I/O access requests issued by said players by registering said requests received by said main program subsystem and submitting said received requests to said game information storage subsystem for implementing the read or write accesses corresponding to said requests, said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said players upon completion of said submitted requests. (See Fig. 1 (110, 120, 130), col. 13, line 59-col. 14 line 47, col. 8, lines 3-67.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 9:

The on-line game information service system of claim 8, wherein said information storage subsystem comprises at least one information storage means integrated for providing information storage functionality as a whole for said information service. (See Fig. 1 and col. 8, lines 3-67.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 10:

The on-line game information service system of claim 9, wherein each of said at least one information storage means is a disk-based storage device. (See Fig.1, col. 6, lines 16-24.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 11:

The on-line game information service system of claim 9, wherein each of said at least one information storage means is an information storage server. (See Fig. 1, col. 6, lines 24-35.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 12:

The on-line game information service system of claim 8, wherein each of said at least one information storage means is a server cluster including at least one server connected in a local area network. (See Fig. 1 (113, 123, 132, 190) col. 5, lines 41-45.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 13:

The on-line game information service system of claim 9, wherein one of said at least one information storage means stores player identification information for said game information service system.

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system wherein one of

said at least one information storage means stores player identification information. However, Spaur teaches an on-line game playing with player identification information. (See Fig. 6.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 14:

The on-line game information service system of claim 9, wherein one of said at least one information storage means stores game virtual geological information for said game information service system.

This claim is objected to for being dependent upon a rejected claim.

Claim 15:

The on-line game information service system of claim 9, wherein one of said at least one information storage means stores game player game status information for said game information service system.

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system with means for storing game player game status information. However, Spaur teaches an on-line game playing with such means. (See Fig. 6, 7, 8, 9.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 16:

The on-line game information service system of claim 8, wherein said I/O access agent subsystem comprises at least an I/O access agent module integrated for implementing said registering and submission of said requests as a whole for said information service. (See abstract and col. 7, lines 5-8.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game information service system. (See Fig. 1, abstract)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 17:

The on-line game information service system of claim 8, wherein said main program subsystem comprises at least a main program module integrated for providing said game information access service to said as a whole for said information service. (See col. 7, lines 5-8 and col. 8, lines 3-40.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game information service system. (See Fig. 1, abstract)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 18:

The on-line game information service system of claim 16, wherein one of said at least one I/O access agent module is implementing said registering and submission of said requests in relation to game player identification information for said game information service system.

(See col. 7, lines 5-8.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game information service system. (See Fig. 1, abstract)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 19:

The on-line game information service system of claim 16, wherein one of said at least one I/O access agent module is implementing said registering and submission of said requests in relation to game virtual geological information for said game information service system.

This claim is objected to for being dependent upon a rejected claim.

Claim 20:

The on-line game information service system of claim 16, wherein one of said at least one I/O access agent module is implementing said registering and submission of said requests in relation to game player game status information for said game information service system.

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system with means for implementing game player game status information. However, Spaur teaches an on-line game playing with such means. (See Fig. 6, 7, 8, 9.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 21:

The on-line game information service system of claim 17, wherein said main program subsystem comprises at least a main program module integrated for receiving said I/O access requests issued by said users as a whole for said information service.

Sonoda teaches a main program module integrated for receiving said I/O access requests issued by said users as a whole for said information service. (See claim 1 above) Sonoda does not teach an on-line game information service system. However, Spaur teaches an on-line game information service system. (See Fig. 1, abstract)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 22:

The on-line game information service system of claim 21, wherein one of said at least one main program module is implementing said receiving of said requests in relation to game player identification information for said game information service system.

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system wherein one of said at least one information storage means for implementing player identification information. However, Spaur teaches an on-line game playing with player identification information. (See Fig. 6.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 23:

The on-line game information service system of claim 21, wherein one of said at least one main program module implementing said receiving of said requests in relation to game virtual geological information for said game information service system.

This claim is objected to for being dependent upon a rejected claim.

Claim 24:

The on-line game information service system of claim 21, wherein one of said at least one main program module is implementing said receiving of said requests in relation to game player game status information for said game information service system.

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game information service system with means for storing game player game status information. However, Spaur teaches an on-line game playing with such means. (See Fig. 6, 7, 8, 9.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur because it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Claim 26:

A method for providing interruption-free file access service to game players communicating to an on-line game information service via Internet in an on-line game information

service system comprising a main program subsystem, an information storage subsystem and an I/O access agent subsystem, said method comprising the steps of: (See Fig. 1)

a) said main program subsystem registering information access requests issued by said game players in a list and submitting said requests to said I/O access agent subsystem; (See fig. 1, col. 5, line 57-col. 6, line 6.)(It is inherent that a computer system includes a main program for executing software codes to perform the intended output.)

b) said I/O access agent subsystem submitting said requests issued by said game players to the information subsystem for implementing read or write accesses corresponding to said requests; and (See col. 8, lines 24-32.)

c) said I/O access agent subsystem relaying the result of said requests to said main program subsystem for returning to said game players upon completion of access of said submitted requests by said information storage subsystem, wherein said on-line game information service system continuing said on-line game information service for said game players before said completion of an I/O access that is pending. (See abstract, Fig. 1 (110, 120, 130), col. 13, line 59-col. 14, line 47, col. 8, lines 3-67.)

Sonoda teaches a storage system, which includes multiple interfaces for external connection. Sonoda does not teach an on-line game. However, Spaur teaches an on-line game playing with advertising. (See Fig. 1 and abstract.)

Hence, it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to use the storage system taught by Sonoda with the on-line game disclosed by Spaur it would allow the system to provide file access service free from interruption to a large number of clients simultaneously such as an on-line game.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Coffy whose telephone number is (571) 272-3997.

The examiner can normally be reached on 8:30 - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Coffy
Patent Examiner
Art Unit 2157

EC may 10, 2005


SALEH NAJJAR
PRIMARY EXAMINER